DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-021837

Address: 333 Burma Road **Date Inspected:** 18-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai

CWI Name: Tian Lei, Liu Fa Wen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 1

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail member identified as 20TR2-037 for weld(s) 009, 011, 013, 015, & 017. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSR(B)-461.

This inspector observed ZPMC personnel setting of jigs for upcoming fabrication of bike path hand rails in accordance with drawing BKR-NS-40.

Performed verification VT for the component(s) identified as OBG Traveler Rails for components listed as 9TR1-001 & 9TR2-001, This QA inspector signed green tag #14435.

Performed verification VT for the component(s) identified as OBG Traveler Rails for components listed as 11TR12-001, This QA inspector signed green tag #14437.

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Performed verification VT for the component(s) identified as OBG Traveler Rails for components listed as 10TR3-0013, This QA inspector signed green tag #14436.

Performed verification VT for the component(s) identified as OBG Traveler Rails for components listed as 11TR9-001, This QA inspector signed green tag #14438.

Performed verification VT for the component(s) identified as OBG Traveler Rails for components listed as 11TR2-008, This QA inspector signed green tag #14439.

Bay Number 3

This inspector did not observe any work being performed in this bay at this time.

Bay Number 8

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. All components were as listed on NWIT notification no. 08572 & 08573. The member(s) is/are identified as OBG Bike Path as component BK4A-060 with the following identifying weld no.(s):

- 1. BK004A6-062-003~006, 150~153, 008~011, 154~157, 037, 161, 039, 128, 025, 159, 027, & 125.
- 2. BK004A8-062-003~006, 121~124, 008~011, 125~128, 037~039, 129, 025~028.
- 3. BK004A2-060-001, 003~007, 009~012.
- 4. BK004A3-060-019, 020, 032, 033, 043, 044, 058, 059, 021, 022, 030, 031, 045, 046, 056, 057, 005, 009, 002, 003, 007, 010.
- 5. BK004A4-060-006, 007, 021, 022, 032, 033, 047, 048, 058, 059, 073, 074, 004, 005, 019, 020, 030, 031, 045, 046, 056, 057, 071, 072.
- 6. BK004A5-060-112, 115, 118, 121, 122, 125, 128, 131, 002, 003, 006, 008, 004, 005, 007, 009, 014, 015, 024, 025, 034, 035, 044, 045, 054, 055, 064, 065, 074, 075, 084, 085, 110, 111, 113, 114, 116, 117, 119, 120, 123, 124, 126, 127, 129, 130, 132 133.
- 7. BK004A6-060-061, 063, 065, 070, 076, 078, 080, 082, 086, 088, 090, 092, 096, 098, 100, 102, 072, 073.
- 8. BK004A8-060-061, 063, 065, 070, 076, 078, 080, 082, 086, 088, 090, 092, 096, 098, 100, 102, 072, 073.

Performed verification VT for the component(s) identified as OBG Bike Path for component listed as BK4A-060 for steps 4 & 5, This QA inspector signed green tag #14440.

FCAW welding of complete joint penetration welds located on Bike Path component identified as BK004A6-060 weld no.(s) 001, 002, 007, & 165. Welder is identified as welder no. 500479. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2232-ESAB.

FCAW welding of complete joint penetration welds located on Bike Path component identified as BK004A8-060 weld no.(s) 001, 002, 007, & 130. Welder is identified as welder no. 054459. The welding variables recorded by ZPMC QC identified as Liu Fa Wen appeared to comply with applicable WPS(s) WPS-B-T-2232-ESAB.

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Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents





Summary of Conversations:

Pertinent conversations are included in the body of the report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez, Rene	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer